

those of *Williamsonia spectabilis* and *W. pecten*, also figured by Nathorst (1909, pl. ii. figs. 8-15), are very elongated, and may be as much as .065 mm. in length. In the case of the small flower originally described by Nathorst (1909, p. 20) as *Williamsonia* (?) *liquieri*, and subsequently referred by Thomas (1915, p. 134) to his new genus *Williamsoniella*, the spores are from .025 to .03 mm. in diameter, and usually round or elliptical. If, then, the size and shape of the spores is a sound guide to affinity, we have here an additional reason for referring the present specimen to the genus *Williamsoniella*, even if the structure of the central axis remains uncertain.

I therefore propose to name it *Williamsoniella valdensis*, sp. n.

LITERATURE.

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 THOMAS, H. HANSHAW. (1915.) "On *Williamsoniella*, a new Type of Bennettitalean Flower." Phil. Trans. Roy. Soc. [B] vol. ccvii. pp. 113-148.
 WIELAND, G. R. (1914.) "La Flora Liasica de la Mixteca Alta." Bol. Inst. Geol. de Mexico, no. 31. [Atlas, 1916.]

EXPLANATION OF PLATE XII. FIGS. 1-3.

- Fig. 1. *Williamsoniella valdensis*, sp. n., Wealden, Hastings, Sussex. Rufford Coll. Brit. Mus. Nat. Hist. Geol. Dept., V. 3175. About nat. size. Photo P. Dollman.
 Fig. 2. The same, enlarged, showing probable synangia at B. Photo P. Dollman.
 Fig. 3. The same. Mass of microspores from near the point A in fig. 2. $\times 380$. Photo F. W. Edwards.

LIII.—*Note on Parkia decipiens*.

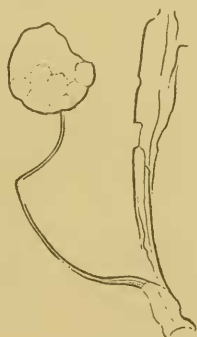
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[Plate XII. figs. 4 & 5.]

A VERY full account of the morphology and histology of *Parkia decipiens*, Fleming, was recently given by A. W. R.

Don and G. Hickling (Quart. Journ. Geol. Soc. 1917, vol. lxxi. for 1915, pp. 648-666, pl. liv.-lvi.). The purpose of the present note is to draw attention to two specimens in the Geological Department of the British Museum (Natural History) which seem to support the view that *Parka* may have been stalked, for, although Messrs. Don and Hickling examined many hundreds of specimens, they found no instance of attachment of the plant-body, and came to the conclusion that *Parka* was an entirely independent organism. Similarly, Messrs. Reid, Graham, and Macnair (Trans. Geol. Soc. Glasgow, vol. xi. 1898, p. 115) state that *Parka* has "never been found in undoubted organic union with any of the other vegetable remains," though "evidence is not, however, wanting of it having been attached to a stalk," and they



? *Parka decipiens*, Fleming. Drawing to show faint indications of *Parka*-like disc impressions. V. 3247. W. How del. $\times 3$.

figure a "supposed case of stalk attachment" at pl. viii. fig. 4.

The two specimens forming the subject of the present note were both obtained from the lower Old Red Sandstone of Canterland, Kincardineshire, by the Rev. Hugh Mitchell, whose collection was purchased for the Museum in 1893. The more interesting of the two, no. V. 3247 (see Pl. XII. fig. 4, and text-fig.), consists of a small circular body about 4 mm. in diameter, apparently attached to a slender stalk some 14 mm. in length, which, again, is given off from a fragment of a stouter axis about 1 mm. in diameter and 18 mm. in length. In the proximal portion of the circular

body some rather obscure round markings can be seen, which are probably the impressions of the well-known "discs" of *Parka*, but there is no trace of carbonaceous matter. The specimen is only slightly smaller than the smallest example found by Don and Hickling, which was about 5 mm. in diameter, and it seems possible that it is actually a small specimen of *Parka* borne on a slender stalk. At any rate, it is hoped that the figuring of this interesting fossil will stimulate the search for further material which might help to elucidate the problem. For it is unfortunate that the axis of this specimen is too small and incomplete to allow of comparison with any known plant-impressions from the Old Red Sandstone or to give any idea of the appearance of the whole plant. There is a possibility that *Parka* may have been normally attached only in its young stage, though much larger specimens have been found which are apparently stalked, such as the one figured by Reid, Graham, and Macnair, and referred to above. Another example is the second of the two specimens to be mentioned in this note, no. V. 12643 (see Pl. XII. fig. 5). The plant-body is roughly circular, about 2.2 cm. in diameter, and has the appearance of being attached to a fragment of stalk, though possibly the juxtaposition may be accidental, for the point of attachment does not seem to have been at the margin.

While affording little further evidence as to the exact nature and systematic position of this plant, the occurrence of such specimens shows that we are not yet justified in regarding *Parka* as an entirely independent organism.

EXPLANATION OF PLATE XII. FIGS. 4 & 5.

Fig. 4. ? *Parka decipiens*, Fl., from the lower Old Red Sandstone of Canterland, Kincardineshire. Mitchell Coll., Brit. Mus. Nat. Hist. Geol. Dept., V. 3247. $\times 2$.

Fig. 5. *Parka decipiens*, Fl., with apparent stalk, from the same locality and horizon. Mitchell Coll., Brit. Mus. Nat. Hist. Geol. Dept., V. 12643. $\times \frac{2}{3}$.

The photographs are by Mr. P. Dollman. I am indebted to Miss W. How for the drawing of the text-figure.